UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

EXAMINER

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### NOTICE OF ALLOWANCE AND FEE(S) DUE

24737	7590	03/11/2000

PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

TANDARDS SHANKAR, VIJAY

ART UNIT PAPER NUMBER

2629 DATE MAILED: 03/11/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/546,391	08/18/2005	Willem Lubertus Ijzerman	NL 030166	1027

TITLE OF INVENTION: PASSIVE MATRIX DISPLAY WITH BISTABLE ELECTRO-WETTING CELLS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	06/11/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1:313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

indicated unless correct maintenance fee notifica	ed belôw or directed otl	nerwise in Block 1, by (	a) specifying a new o	orres	pondence address;	and/o	r (b) indicating a sepa	rate "FEE ADDRESS" fo
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)  24737 7590 03/11/2009				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, mus have its own certificate of mailing or transmission.				
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10/546,391	08/18/2005		Willem Lubertus Ijze	rman			NL 030166	1027
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nonprovisional	NO	\$1510	\$300	_	\$0		\$1810	06/11/2009
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Please check the appropr	riate assignee category or	categories (will not be p	rinted on the patent):		Individual	orporati	ion or other private gro	up entity 🖵 Government
4a. The following fee(s) are submitted: ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			49. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)  A check is enclosed.  Payment by credit card. Form PTO-2038 is attached.  The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Depoist Account Number  (enclose an extra copy of this form).					
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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

Alexandria, Virginia 22313-1450.



# UNITED STATES PATENT AND TRADEMARK OFFICE

### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS P.O. BOX 3001 BRIARCLIFF MANOR, NY 10510			SHANKAR, VIJAY			
			ART UNIT	PAPER NUMBER		
			2629			

DATE MAILED: 03/11/2009

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

 $(application \ filed \ on \ or \ after \ May \ 29, \ 2000)$ 

The Patent Term Adjustment to date is 403 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 403 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Application No. Applicant(s) 10/546,391 IJZERMAN ET AL. Notice of Allowability Examiner Art Unit VLIAY SHANKAR 2629 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to 12/01/08. 2. The allowed claim(s) is/are 1-14. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some\* c) ☐ None of the: 1. A Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 6 Interview Summery (PTO-413) Notice of Draftperson's Patent Drawing Review (PTO-946). Paper No./Mail Date

U.S. Patent and Trademark Office PTOL-37 (Rev. 08-06)

/VIJAY SHANKAR/ Primary Examiner, Art Unit 2629

Pacer No./Mail Date

of Biological Material

3. Information Disclosure Statements (PTO/SB/08),

4. T Examiner's Comment Regarding Requirement for Deposit

9. ☐ Other

7. T Examiner's Amendment/Comment

8. X Examiner's Statement of Reasons for Allowance

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### DETAILED ACTION

# Allowable Subject Matter

- Claims 1-14 are allowed.
- 2. The following is an examiner's statement of reasons for allowance: The Prior arts Sheridan et al, Pamula, Kawanami et al fails to teach a display unit comprising at least one electro-wetting pixel, each electro-wetting pixel comprising: a closed cell; a polar liquid and a non-polar liquid, said liquids being immiscible, having different optical properties and being contained in said cell; a counter electrode; and at least one electrode pair, each electrode pair comprising an address electrode and a retain electrode, said address and retain electrodes being separated from said liquids by a surface that is lyophobic in relation to only one of said liquids; and wherein said address and retain electrodes are arranged at respective electric potentials to control a spatial distribution of said liquids and thereby defining a multi-stable pixel state, and wherein a current state is retained by applying a potential to the retain electrode in relation to the counter electrode and removing any potential from the address electrode in relation to the counter electrode as claimed in Claim 1.
- 3. The Prior arts Sheridan et al, Pamula, Kawanami et al fails to teach a method for bistable addressing of at least one electro-wetting pixel, each pixel comprising an address electrode, a retain electrode and a counter electrode, in which an active state is set by applying a potential to the address electrode and the retain electrode in

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relation to the counter electrode; and in which a passive state is set by removing any potential from the address electrode and from the retain electrode in relation to the counter electrode; the method further comprising the step of retaining a current state by applying a potential to the retain electrode in relation to the counter electrode and removing any potential from the address electrode in relation to the counter electrode as claimed in Claim 12.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to VIJAY SHANKAR whose telephone number is (571)
 272-7682. The examiner can normally be reached on M-F 7:30 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (571) 272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/VIJAY SHANKAR/ Primary Examiner, Art Unit 2629

VS